

Notice of Allowability

Application No.

09/187,472

Examiner

Drew E. Becker

Applicant(s)

ALLINGTON ET AL.

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Brief filed 3/20/07.
2. ☒ The allowed claim(s) is/are 82-111.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☒ to Paper No./Mail Date 10/8/99.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

1. Claims 82-111 are allowed.
2. The following is an examiner's statement of reasons for allowance: the method of roasting coffee beans of independent claim 82 defines over the prior art of record because the prior art does not teach, suggest, nor render obvious establishing the degree to which the coffee beans must be roasted to attain a desired aroma, generating a measurable first parameter which is indicative that the coffee beans have been sufficiently roasted to yield the desired aroma; storing the first parameter, roasting fresh coffee beans at a roasting temperature by flowing heated air over the fresh coffee beans, filtering substantially all pollutants from the heated air following the roasting step, thereafter reheating and recirculating a major portion of the substantially pollutant-free air over the fresh coffee beans to thereby continue roasting, cooling a minor portion of the filtered air to no more than about 115° F and discharging the cooled minor portion of the air into an interior of a building frequented by humans while reheating and recirculating the major portion of the air for further use during roasting, monitoring a second parameter which is compatible with the first parameter and is generated by the fresh coffee beans during roasting, upon detecting a match between the first and second parameters, discontinuing the roasting step, and wherein the steps of roasting, filtering, reheating, recirculating, cooling and discharging are simultaneously and continuously performed while roasting is in progress;

Art Unit: 1761

the method of automatically roasting coffee beans to attain a predetermined, desired coffee aroma of independent claim 90 defines over the prior art of record because the prior art does not teach, suggest, nor render obvious roasting a sample of the beans to a degree at which coffee made with the beans exhibits the desired aroma, sensing one of a color and a darkness of the beans when the beans have reached the degree of roasting and from the sensed color or darkness generating a first parameter which is indicative of the sensed color or darkness of the bean sample, storing the first parameter, thereafter roasting a batch of more than One pound of fresh beans by flowing heated air over the fresh beans, cleaning the heated air after it has passed the fresh beans so that the air is substantially pollutant-free, cooling the air after the air has passed the fresh beans to no more than about 115° F while continuing flowing the heated air over the fresh beans, discharging the cooled, pollutant-free air into a substantially closed room frequented by humans, monitoring one of the color and darkness of the fresh beans being roasted and generating a second parameter which is indicative of a color or darkness of the fresh beans, comparing the first and second parameters during roasting of the fresh beans, terminating the roasting of the fresh beans when the first and second parameters match, and wherein the steps of roasting, cleaning, cooling and discharging are simultaneously and continuously performed while roasting is in progress;

the method for uniformly roasting coffee beans at a plurality of geographically separate location of independent claim 91 defines over the prior art of record because the prior art does not teach, suggest, nor render obvious placing a roasting machine at

Art Unit: 1761

each location inside an enclosed room frequented by humans, equipping each roasting machine with a roasting container for holding fresh beans while the beans are being roasted, a hot air supply for heating the fresh beans to a roasting temperature, and an air removal system for directing used air away from the container, removing from the used air substantially all debris, smoke, oil, and other pollutants in a filtration system, after the step of removing, cooling the used air, discharging the at least a portion of the cooled air into the enclosed room while continuing heating the fresh beans, recirculating a remaining portion of the cooled air to the hot air supply, directing a laser light beam of a frequency in the range of between about 600-800 nm onto the beans in the container during roasting, generating an output signal from laser light reflected by the beans which is a function of the observed darkness of the beans, providing each roasting machine with a computer including a memory; feeding the output signal to the computer, at a central control station determining an optimal darkness for each bean type that will be roasted by the roasting machines, at the control station generating a control signal which reflects the optimal darkness of each roasted bean type, downloading the control signal from the central control station to the computer of each roasting machine, during roasting at any given roasting machine comparing the control signal stored in the associated memory with the output signal generated by the instrument; when the compared signals match, generating a command signal, and using the command signal to terminate the roasting of the beans in the container, wherein the steps of removing, cooling, discharging and recirculating are simultaneously and continuously performed while roasting is in progress;

Art Unit: 1761

the method of roasting coffee beans of independent claim 94 defines over the prior art of record because the prior art does not teach, suggest, nor render obvious establishing the degree to which the coffee beans must be roasted to attain a desired aroma, generating a measurable first parameter which is indicative that the coffee beans have been sufficiently roasted to yield the desired aroma, storing the first parameter, roasting a batch of more than one pound of fresh coffee beans at a roasting temperature by flowing heated air over the fresh coffee beans, while flowing heated air over the fresh coffee beans, removing substantially all pollutants from the air downstream of the fresh coffee beans being heated in a filtration system, cooling at least a portion of the air downstream of the fresh coffee beans to no more than about 115° F, and thereafter, while continuing to flow heated air over the fresh coffee beans, exhausting the cooled air directly into a room of a building without recirculating any part of the cooled air into the filtration system, monitoring a second parameter which is compatible with the first parameter and is generated by the fresh coffee beans during roasting, and upon detecting a match between the first and second parameters, discontinuing the roasting step;

the method of roasting coffee beans of independent claim 102 defines over the prior art of record because the prior art does not teach, suggest, nor render obvious establishing the degree to which the coffee beans must be roasted to attain a desired aroma by determining a first parameter which comprises at least one of a color and a degree of darkness which the coffee beans must have to yield the desired aroma, generating at least one second parameter which reflects a predetermined

Art Unit: 1761

development of the first parameter during a roasting of the coffee beans, storing the parameters; roasting fresh coffee beans at a roasting temperature, monitoring the first parameter during roasting and discontinuing the roasting step when the coffee beans reaches the first parameter, monitoring the at least one second parameter during roasting, and adjusting the roasting step when the second parameter indicates that a deviation from the predetermined development of the first parameter occurred to thereby reestablish the predetermined development of the second parameter;

the method of roasting coffee beans in a supermarket located inside a building of independent claim 110 defines over the prior art of record because the prior art does not teach, suggest, nor render obvious establishing the degree to which the coffee beans must be roasted to attain a desired aroma, generating a measurable first parameter which is indicative that the coffee beans have been sufficiently roasted to yield the desired aroma; storing the first parameter, roasting fresh coffee beans at a roasting temperature by flowing heated air over the fresh coffee beans, while flowing heated air over the fresh coffee beans removing substantially all pollutants from the air downstream of the fresh coffee beans being heated, cooling the air downstream of the fresh coffee beans to no more than about 115° F, and thereafter, while continuing to flow heated air over the fresh coffee beans, exhausting the cooled air into the supermarket; monitoring a second parameter which is compatible with the first parameter and is generated by the fresh coffee beans during roasting, and upon detecting a match between the first and second parameters, discontinuing the roasting step;

the method of automatically roasting coffee beans to attain a predetermined desired coffee aroma of independent claim 111 defines over the prior art of record because the prior art does not teach, suggest, nor render obvious roasting a sample of the beans inside a supermarket to a degree at which coffee made with the beans exhibits the desired aroma, sensing one of a color and a darkness of the beans when the beans have reached the degree of roasting and from the sensed color or darkness generating a first parameter which is indicative of the sensed color or darkness of the bean sample, storing the first parameter; thereafter roasting fresh beans by flowing heated air over the fresh beans, cleaning the heated air after the heated air has passed the fresh beans so that the air is substantially pollutant-free, cooling the air after the air has passed the fresh beans to no more than about 115° F while continuing flowing the heated air over the fresh beans, discharging the cooled, pollutant-free, room temperature air into the supermarket, monitoring one of the color and darkness of the fresh beans being roasted and generating a second parameter which is indicative of a color or darkness of the fresh beans, comparing the first and second parameters during roasting of the fresh beans, and terminating the roasting of the fresh beans when the first and second parameters match.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Drawings

3. The drawings filed on 11/6/98 are acceptable subject to correction of the informalities indicated on the "Notice of Draftsperson's Patent Drawing Review," PTO-948 sent to applicant on 10/8/99. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew E. Becker whose telephone number is 571-272-1396. The examiner can normally be reached on Mon.-Fri. 8am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DREW BECKER
PRIMARY EXAMINER
6-14-99